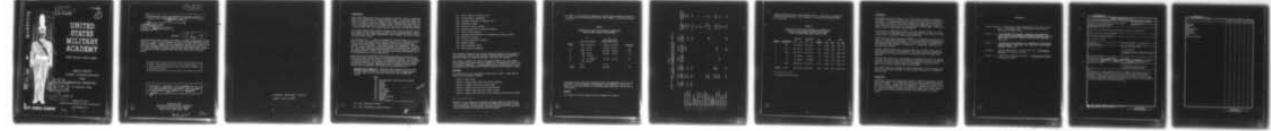


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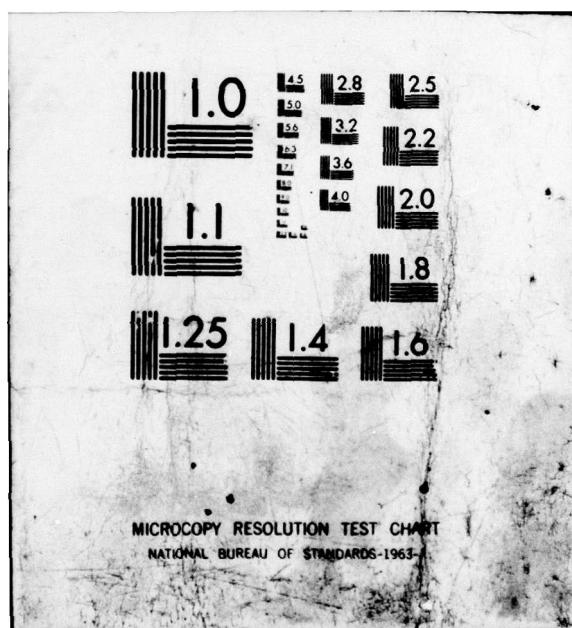
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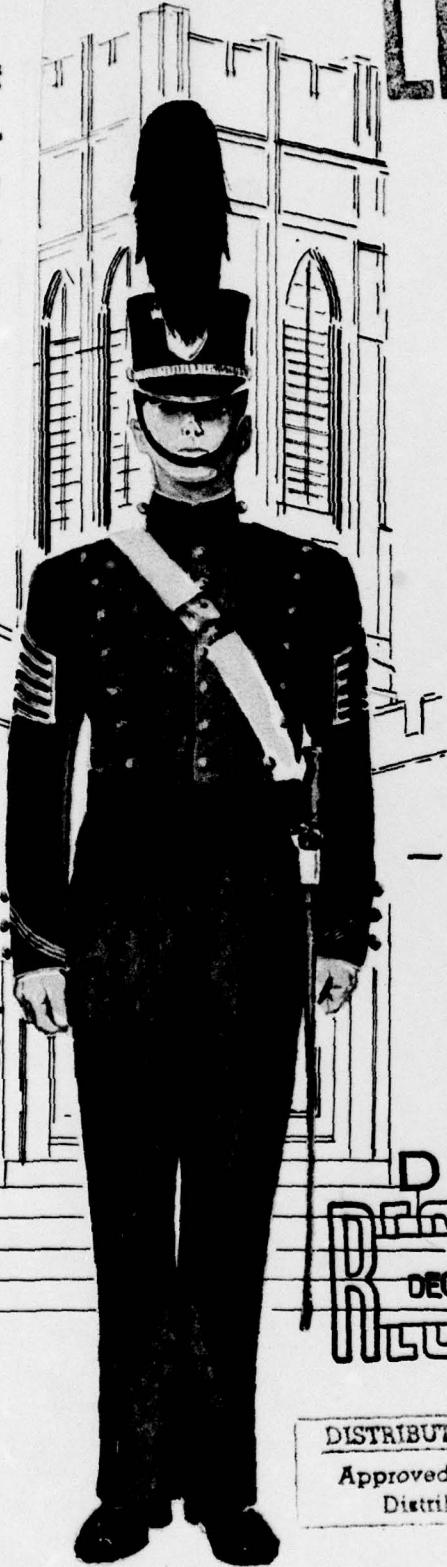
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BIRTH ORDER,
FAMILY CONFIGURATION
AND
PERSONAL PROBLEMS
(A Research Note)

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BIRTH ORDER, FAMILY CONFIGURATION AND PERSONAL PROBLEMS

(9)

RESEARCH NOTE

(14)

Report No. 1B4.00-74-006

Project No. 121

Prepared by: (10) Joseph E. Marron
September 1973

ABSTRACT

(11)

Sep 73

Significant birth order effects were found in a sample of applicants to West Point with respect to the frequency with which they reported having various personal problems. Perhaps the most significant results of the study is the fact that, although oldest boys are attracted to institutions such as the U.S. Military Academy in greater proportionate numbers than others, there is no evidence that they perform better than those from other birth-order groups.

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INTRODUCTION

Birth Order effects have had a long history of analysis, with a considerable amount of inconsistency in findings (Warren, 1966). In the most recent review of the state of the art, Schooler (1972) concludes from his review that there is "almost no reliable evidence for birth order effects among men living in the United States in the middle 1960's, and only a marginal increase in such evidence when such restrictions as time, place, and sex are removed."

In the most recent study available, Breland (1972) found consistent effects with respect to both birth order and family size on National Merit Scholarship Qualifying Test (NMSQT) performance, with firstborn and those of smaller families scoring higher.

As Schooler put it, "...future investigators, including myself, will not be able to resist the temptation of taking a cheap bet on a long shot by collecting birth order data on their subjects as they pursue studies more central to their interests." The present study is no exception. The data for the present study were originally gathered in connection with a study on the "real versus the perceived environment" and their respective effects on performance (Marron, 1971a, 1971b) in which birth order was examined as one of the elements of the "real environment."

There was one set of questions which became particularly interesting in a manner other than that for which it was originally intended. In an effort to obtain some feel for the kinds of interpersonal relations that prevailed in problem situations, the examinee was asked to choose any one of eleven alternatives that was most appropriate when the examinee had experienced certain kinds of problems. The questions and alternatives are:

Questions 103 through 117. Using the codes assigned for each of the persons listed, indicate the individual from whom you have obtained the most help when you were having difficulty with the problems listed.

CODE

- 00. Not applicable (never had the problem)
- 01. Father
- 02. Mother
- 03. Brother
- 04. Sister
- 05. Boy friend
- 06. Girl friend
- 07. Relative
- 08. Clergyman
- 09. School counselor
- 10. Teacher
- 11. Other (specify) _____

103. With a mechanical device

104. With a mathematics homework problem

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Unannounced	
Justification _____	
By _____	
Distribution/	
Availability Codes	
Dist.	Avail and/or special
A	

105. With a radio or television set
106. Understanding a paragraph
107. Building furniture (or shelves, etc.)
108. Learning to dance
109. Writing a letter or paper
110. Getting along with a particular person
111. With a moral problem
112. Deciding what profession or occupation you wish to pursue
113. Choosing a college
114. In your classwork in general
115. Making friends
116. With a personal enemy
117. With financial problems

Prior analysis indicated that the most important element was the number of "Not Applicable (never had the problem)" responses made by the examinee and/or the number of specific questions which were not answered.

This study is primarily an effort to determine whether any relationship exists between birth order and the frequency of "Not Applicable (never had the problem)" responses. A second purpose was to determine whether any relationship existed between birth order and indices of performance at USMA.

PROCEDURE

The subjects were 2,410 applicants to West Point in 1965. These were divided into six groups as follows:

- Group A = Only child
- Group B = Oldest child (with one or more siblings)
- Group C = Youngest (with one or more older)
- Group D = Middle child with two or more brothers
- Group E = Middle child with two or more sisters
- Group F = Middle child with two or more siblings of both sexes (mixed).

¹Analysis of the summaries of responses indicated that those who did not answer a question were more likely "not to have had the problem," rather than constituting a unique group, and hence were combined with those who actually indicated that they never had the problem.

The number in each group and comparative figures from the administrations of the National Merit Scholarship Qualifying Test (NMSQT) in 1965 are presented in Table 1.

TABLE 1

COMPARISON OF WEST POINT APPLICANT SAMPLE WITH
NATIONAL NORMS (NMSQT ADMINISTRATION)

<u>Group</u>	A. West Point Sample		B. National Norms NMSQT (Males Only)		<u>% A of B</u>	
	N	%	N	%		
A	191	(7.9)	38,650	(11.3)	.49	
B	1,234	(51.2)	145,971	(42.6)	.85	
C	438	(18.2)	80,109	(23.4)	.55	
D	88	(3.6)				
E	71	(3.01)	22.7	77,695	(22.7)	.70
F	388	(16.1)				
TOTAL	2,410		342,425		.70	

The number of each group who responded either "Not Applicable (never had the problem)" or did not respond to the question was determined, and the Chi-square test for significance of differences among groups was carried out for each question.

RESULTS

The results of the Chi-Square tests are summarized in Table 2.

TABLE 2
SUMMARY OF RESULTS OF TESTS OF DIFFERENCES AMONG GROUPS, WITH RESPECT TO
THE FREQUENCY OF EXPERIENCE WITH EACH PROBLEM

	Group A Only Child	Group B Oldest Child	Group C Youngest Child	Group D All Boys	Group E Not B or C All Girls	Group F Not B or C Mixed	Chi Square Value		Significance Level
							Fewer	More	
A. Mechanical device		More					39.004	.001	
B. Mathematics homework	More	Fewer	More				30.725	.001	
C. Radio or television set		Fewer					29.985	.001	
D. Understanding a paragraph			Fewer	More			NS	-	
E. Building furniture							NS	-	
F. Learning to dance							NS	-	
G. Writing a letter							NS	-	
H. Getting along with a particular person			Fewer				12.16021	.05	
I. Moral Problems			Fewer				14.242	.02	
J. Deciding on a profession or occupation			Fewer	Most					
K. Choosing a college			Fewer	More			32.896	.001	
L. Classwork in general			Fewer				20.058	.01	
M. Making friends							16.509	.01	
N. Personal enemy							NS	-	
O. Financial problems			Fewer	More			20.018	.001	

Summary performance data is presented in Table 3. There are no significant differences in separation rates, academic or leadership performance among the six groups.

TABLE 3

SEPARATIONS, GRADE POINT AVERAGES, AND APTITUDE FOR
SERVICE RATING AVERAGES BY BIRTH ORDER GROUPS
(END OF FOURTH CLASS YEAR, CLASS OF 1969)

<u>Groups</u>	<u>Applicants</u>	<u>Entered</u>		<u>Separated</u>		<u>No. Active</u>	<u>GPA</u>		<u>ASR*</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
A	191	53	(27.7)	12	(22.6)	41	2.413	.139	976	187
B	1234	395	(32.0)	75	(19.0)	320	2.414	.150	987	199
C	438	150	(34.2)	28	(18.7)	122	2.431	.129	1026	196
D	88	35	(39.8)	5	(14.3)	30	2.417	.142	1000	159
E	71	27	(38.0)	8	(29.6)	19	2.421	.124	1090	163
F	388	128	(33.0)	21	(16.4)	107	2.428	.132	1024	180
TOTALS	2416	788	(32.6)	149	(18.9)	639	2.420	.140	1004	187

*In Proportional Parts form.

DISCUSSION

The comparative data in Table 1 is of some interest insofar as they are a reflection of the type of person who is most and least inclined to apply to West Point. A significantly larger proportion of applicants to West Point are oldest sons than is true of the college bound population and significantly smaller proportions of only and youngest children apply to West Point than is true of the college bound population.

The results, as summarized in Table 2, in some instances reflect the traditional concept of the advantages of being the oldest in the family or being the only boy, as opposed to being the youngest boy.

Oldest boys have fewer problems of deciding on a profession, choosing a college, and fewer financial problems. The only boy also has fewer problems in choosing a college and with finances. On the other hand, the youngest has more problems with deciding on a profession or occupation, choosing a college and with finances.

Another popular concept that the male member who is oldest is more mature and even extroverted is also supported. The oldest has significantly fewer difficulties with getting along with a particular person and fewer moral problems.

The fact that there were no differences in performance among the six groups indicates that birth order has no bearing on admission policies and that any feelings, beliefs or opinions about the advantages of attracting oldest boys, or boys from any other group, are unfounded.

That oldest boys are attracted to Military Academies in greater numbers and that only and youngest children in fewer numbers can only be attributed to cultural bias.

CONCLUSIONS

Significant birth order effects were found in a sample of applicants to West Point with respect to the frequency with which they reported having various personal problems. Perhaps the most significant results of the study is the fact that, although oldest boys are attracted to institutions such as the U.S. Military Academy in greater proportionate numbers than others, there is no evidence that they perform better than those from other birth-order groups.

REFERENCES

Breland, Hunter M. "Birth Order, Family Configuration and Verbal Achievement." Unpublished report, Educational Testing Service, New Jersey, October, 1972.

Marron, J. E. The Development of Academic, Leadership, and Separation Scores from the Environment and Interest Inventory, Class of 1968. West Point, NY: Office of Institutional Research, May, 1971a.

Marron, J. E. Validation of the Academic E-I, Leadership E-I and Resignation E-I Scores. West Point, NY: Office of Institutional Research, July, 1971b.

Schooler, C. "Birth Order Effects: Not Here, Not Now!" Psychological Bulletin, 1972, 78, pp. 161-175.

Warren, J. R. "Birth Order and Social Behavior." Psychological Bulletin, 1966, 65, pp. 38-49.

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